Dysentery

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An Essay on Dysentery by Wm. Smith of N. Jersey

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Among the catalogue of diseases incident to mankind, there is perhaps none that require a more strict investigation than dysentery. It is a disease of great importance, and one with which the young practitioner cannot be too well acquainted, as there is no one complaint more distressing to the patient or more frequently baffles the exertions of the physician.—

Dysentery may be defined an irritation or disturbance of the functions of the alimentary canal in which the mucous membrane of the intestines is inflamed attended with febrile symptoms, frequent stools, severe griping pains, followed by a tenesmus. The stools although frequent being small in quantity consisting principally of mucus streaked with blood, the natural faces being commonly retained, or

when they do appear, they are generally voided in a compact and hardened state known by the name of scybola.—

The disease has received different names by writers on this complaint, according to the parts affected and the violence of the attack, as hepatic dysentery, when the liver is the seat of the disease, putrid, malignant, &c. according to circumstances.—

There appears to be no propriety in these distinctions, as they are only different appearances of the same disease, induced by climate, season, and constitution.—

Dr Lind says there is a necessary distinction to be made between dysenteries of all climates, when it attacks persons in perfect health he has called it original, and when it attacks those much weakened by fever, or otherwise reduced to a debilitated ~~state~~, symptomatic.—

Dysentery is of more general prevalence in warm

climates than cold ones, particularly the East and West Indies. It frequently breaks out among the crews of ships of war and other vessels cruising or trading in these parts, and sometimes rages with such violence as scarcely to leave men enough to manage the vessel. — It is by no means an uncommon disease to armies, particularly when after or during warm weather, they are long exposed to heavy rains, or lie incamped in the neighbourhood of low swampy grounds. Military history affords numerous examples where dysentery has overcome and frustrated the best concerted plans, and spread dismay and distruction throughout the camp. — It is a subject, says Dr Moseley in his treatise on tropical climates, in which the welfare of mankind is deeply interested, and often the honour of a nation, we need but turn our eyes on the political field; there we behold the best concerted measures defeated by its influence. The page of military

history weeps less for the slain in battle than for those who have fallen victims to this calamity."—

Dysentery is not only a disease of the warmer climate, but of general prevalence in the United States, and often of a nature so fatal that it demands our most serious attention.- It attacks indiscriminately the tender infant, and the aged adult, the delicate citizen, and exposed countryman, the intrepid mariner, and the hardy veteran.—It proves more severe to children and old people than it does to the middle aged, and is more prevalent in the country than in cities, often raging in the suberbs, while the central parts of the city remains entirely exempt from it.—

The disease occurs more frequently in summer and autum, often accompained with our autumnal intermittent, and remittent fevers, and it is sometimes complicated or combined with them.- It is not uncommon says Cleghorn, for a tertian fever, to be changed into a dysentery or a dysentery fever to ~~prate on the~~

tertian form, and for the fits of tertian to be regularly accompained by gripes and stools.—
It is sometimes combined with typhus, and when it puts on this character it generally proves fatal.—
In the West Indies, dysentery commonly makes its appearence a little before the equinox; frequently beginning in august, which is the commencement of the rainy season in these parts, and raging epidemically untill November, and sometimes for a much longer period. It is also said to prevail in the unhealthy districts of the East Indies, and in the British factories on the coast of Africa, both during the wet season and for sometime after it. This is attributed to the great heat of the summer rendering the body irritable and opening the pores of the skin; now when the rain commences it causes a sudden change of cold or moisture, thus suddenly supressing the perspiration and throwing the blood from the exterior, upon the interior vessels, and in this way producing the dysentries.—

The Illustrous Rush says dysentery is the offspring of contagion or miasmata; but in a weak state of the bowels it is frequently brought on by accidental exciting causes, like bilious fever which proceeds from the same miasmta, and that it pervails most in high situations owing to the coldness of the air checking the perspiration, and throwing the fluids upon the bowels, and that he frequently observed dysentery to prevail on elivated places and bilious fever in low situations adjacent to them, and that its frequent occurence in fruit seasons, is owing to the debility occasioned by the use of large quantities of that aliment, predisposing the bowels to marbid action. — I have frequently known, says Dr Mosely, Dysenteries caused by eating immoderately of such fruit as pine-apples and oranges among people newly arrived in the West Indies; and in Paris from drinking the water of the Seine, and from the change of water in other countries, But the cause of epidemical diseases is no more to be

considered from particular cases, than the natural life of man is to be estimated by the age of those that fall by casualty or perish by untimely death". —

The celebrated Cullen contends, that the dysentery does often manifestly arise from the influence of cold, but still the disease is always of a contagious nature; and that it becomes epidemic in camps and other places by the propagation of such contagion, independent of cold, or other exciting causes, and therefore he is doubtful whether the disease does ever arise from from the application of cold unless where the specific contagion has been previously received in the body; and upon the whole he considers the remote cause to be always dependent on specific contagion. —

The doctrine of the celebrated Darwin is, that dysentery is contagious, but that this contagion manifestly arises from the mucus or bloody stools, produced from the membrane which line the intestines, and not from the febrile perspiration or breath of the patient, he says

that the fever is only the effect and not the cause of contagion, and that it is necessary we should pay the strictest attention to cleanliness and the removal of the faeces voided, as soon as possable for the prevention of the contagion.—

Cleghorn when speaking of this disease says, "To me it it appears probable that all the summer and autumnal diseases are the consequence of nature attempting to free the body from noxious humours, either by throwing them upon the skin, or by conveying them through the liver and other organs of secretion, which open into the intestines".—

The illustrious Sydenham considers dysentery to be a fever of the season, or of its own kind, thrown upon the intestines, and Dr Moseley says that from his personal experience in the West Indies, and from accounts received from that part of the globe, he has no hesitation in confirming the truth of Sydenham's remark. "Nor can it be doubted", says this experienced writer, "that this fever

of the intestines like many others, is caused by abstructed perspiration, not confined to cold, hot, dry, or wet seasons; particular food, water, liquor, or fruit, but chiefly depending on some secret influence in the atmosphere, or on sudden transitions of the air, and such other causes as expose people to have perspiration hastily stopped.
Though I believe" continues he, that epidemical dysenteries have but one universal and common cause, and may be removed by one universal and common remedy; yet I do contend that particular disease, may be created by a particular cause, and cured by a particular medicine. Accidental stimuli in the bowels have often caused this disease, and a little rhubarb and laudanum have often cured it."—
That the typhus form of dysentery is sometimes contagious, I believe is generally admitted, this depends on the contagion of that form of fever, and not on the virus specific to the dysentery.—From what I have been able to collect from late writers, and from what I have

seen myself, I am convinced that dysentery itself is not contagious, or in any way dependent on contagion.— But that it often rages as an epidemic proceeding from a common cause or origin, and spreading rapidly from thence in succession or at once through whole families, or entire neighbourhoods, is a fact well known to every practitioner who has had any experience in this disease.—

Causes. There are, a great variety of causes, enumerated by different writers, which give rise to this disease, the most prominent of which, I shall mention.— Cold and moisture, succeeded by intense heat, or great drought; checked perspiration; eating bread made of sour, or putrid grain; unwholesome food of every kind; irregularities in diet; noxious exhalations, and vapours; marsh effluvia; drinking large quantities of cold water, when in a state of perspiration &c. It is said to be sometimes brought on by indigestion; amputation

of a limb; ulcers in the bowels &c. Dysentery, when it arises from marsh effluvia, generally has its primary seat, in the stomach, extending from thence to the bowels, most commonly the large intestines, though sometimes the small ones, are also affected; the bowels when once attacked is its permanent seat; from whence it effects spreads through, or contaminates the whole system. —

Symptoms — An attack of dysentery usually comes on with some degree of coldness, succeeded by slight fever, with quickness of pulse; nausea, and sometimes vomiting; pain in the bowels; loss of appetite; frequent stools; severe griping pain, attended with great inclination to strain over it. As the disease advances, the stools become more frequent, and painful, attended with tormina, tenesmus, and sometimes flatulency. — To these symptoms, succeed a fixed pain in the hypogastrium more or less severe, the pain frequently is extended to one, or both of the iliac regions, and sometimes through-

-out, the whole course of the colon, with a sense of fulness, tension, and a tenderness upon pressure. The stools vary both in composition, and colour, sometimes the discharges are mucus, streaked with blood, at others, they are mucus, without any blood being mixed with them, in the latter case the disease, is, called dysenteria alba. frequently there are fibrous, or membranous, substances, intermixed with the discharges, but for the most part there is mucus, or coagulable lymph thrown off from the intestines. While the stools, continue to be thus frequently voided, and of these various consistences, we seldom can discover any natural faeces, mixed, with them, and when we do they commonly appear in the form of hard seperate balls, known by the name of scybola.—In consequence of the inflammatory condition of the lower intestines inducing an obstinate spasmodic contraction of the colon, and impeding its peristaltic motion, the faecal contents, are frequently for a long time retained,

when these are passed the patient is sure to experience some relief, more especially of the tormina & tenesmus. It is not uncommon from the violent efforts, which are made to discharge the fæces, for the rectum to be protruded, forming prolapsus ani, which often proves very troublesome, and distressing to the patient, the tormina and tenesmus, being now generally increased.— Connected with these symptoms is fever; scorching heat or great perspiration; much thirst; the tongue is now generally white and furred, sometimes exhibiting a smooth, or glossy appearence; the pulse hard and active, sometimes attended with a peculiar thrilling sensation under the finger, this latter state is considered a dangerous symptom. The disease is now considerd at its crisis, and if it is not arrested at this time, the symptoms are generally aggravated. There are coldness of the extremeties; tention of the abdomen; cold clammy sweat; hickup; involuntary discharges, accompained, with great factor, which

at first resembles boiled putrid meat, but is soon changed to a dark grumous, and bloody appearence. The patient is now very much dejected, and feels disposed to dwell upon symptoms, as of great consequence, which to a spectator would appear of minor importance. he evinces the greatest desire for his medical attendant, and is loath to part with him though fully persuaded that all the efforts of his skill, and medicine, are likely to prove unavailing. When things come to this pass; the disease frequently terminates fatally, in the course of a few days.- The space of time occupied in passing through the different stages is very various, according to the violence of the attack; though generally from one, to three, or four weeks. —

<u>Diagnosis</u>. The only disease to which dysentery is intimately allied, is diarrhœa. and it may be readily distinguished from this, by the absence of fever in the latter disease, by the evacuations being more copious, and of a more natural appearence, and by the

griping, and tenesmus, being more moderate, and less frequent. This however is of little consequence, as they are very analagous both in the symptoms and cure.—

<u>Prognosis</u>. To form a correct prognosis of dysentery is frequently very difficult, and embarrassing. the favourable symptoms are sometimes suddenly changed, to those of a very dangerous character, when when we least suspect it. A favourable termination may be anticipated, when the symptoms become more moderate, the stools less frequent, and of a more natural colour and consistence, when there is a diminution of thirst and fever, when the skin is soft and of a natural temperature attended with a mild and general diaphoresis, when the tongue becomes clean, and the pulse slower and more natural, and when there is a gradual diminution of tormina and tenesmus.— But on the contrary, when there is a want of appetite, small and repeated stools, severe griping pains,

great tenesmus, oppressive respiration, great debility, offensive evacuations, with undigested food mixed with them, tension of the abdomen, cold extremities, involuntary discharges, cold clammy sweats, high fever, the pulse weak, and irregular, tympanites, effusion of blood, and other fluids, in different parts of the body, hiccups, and delirium, the case may be considered as extremely dangerous, frequently terminating fatally in the space of a few hours or days.— a sudden cessation of pain, when the disease is of some standing, is generally an unfavourable omen, as it indicates that gangrene, or mortification has taken place.— The above symptoms, however, do not always terminate fatally, Professor Chapman, says he has known cases, in which a great portion of the intestine had sloughed off and discharged by stool, and yet the patient recovered.—

<u>Phenomena</u>. Examinations after death, of persons who have died, of this disease, show various appearences.

The mucous coat of the colon, and rectum, is found to be in a high state of inflammation, sometimes it is entirely distroyed, presenting an offensive fluid of a pale greenish looking colour, coagulable lymph is now and then thrown off, and the rectum is found to be in a state of great contraction. The several coats of the intestines, are generally found to be much thickened, frequently ulcerated, and gangrenous, and sometimes pustular excrescences are seen, filled with fœtid matter, resembling the matter evacuated during life. The omentum, and pancreas, are frequently nearly distroyed, presenting a black coloured mass of various sizes, and consistances.

The lower intestines, are generally the part most inflamed, but the inflammation is not confined to them alone, as the small intestines, stomach, peritoneum, liver, spleen, and indeed nearly all the abdomenal viscera, are sometimes in a high state of inflammation, and frequently forming extensive adhesions

to one another.— Dr Cleghorn says, that in the examinations he made, upon the dead, he constantly found the large intestines either inflamed, and mortified, or entirely mortified, the rectum being the part most generally affected, he frequently discoverd the cavity of the colon straitened in many places by schirrous tubercles, small abcesses in the cellular-menbrane of the peritoneum in the vicinity of the rectum and colon, generally he found the gall bladder filled with bile of a darkish colour, and the spleen more or less in a putrid condition.—

Professor Chapman says, it is evidently the mucous tissue of the primavia, and more particular of the large intestines that is inflamed, when this is the case, he says, we have mucus stools with little or no pain, but the moment it spreads beyong the mucous tissue we have tormina, tenesmus &c. and when it attacks the peritoneum we have lancinating pains, and great distress.—

Treatment. The management of dysentery by different practitioners has been very various, this arises no doubt from their different pathological views, concerning the causes, nature, and seat, of the disease. By one, its considered as highly inflammatory, and calls loudly for the use of the lancet. By another, that a spasmodic contraction of the colon, occasioning a retention of the fecal, and other matter, is the cause of it, and consequently relies on purging. a third thinks that it arises from suppressed perspiration, and recommends sudorifics, as most effectual, While a fourth condems this practice and tells us that the liver is the seat of the disease, therefore mercury must be employed, and unless a salivation is induced, the patient will undoubtedly die. Now all these different modes of treatment we are assured have been successful, and there is no doubt that in certain stages of the disease, and when judiciously employed they have proved servicable, but to say that this complaint can be completely

cured, by any one of these plans exclusively, is saying more than would often be accomplished.—

I shall now give a concise view of the treatment adopted by some of the most able writers, on this subject, and conclude with the modern plan, as persued in this country.—

Dr Lind, an experienced practitioner of the West Indies says that, when a person in health is suddenly attacked with a violent dysentery, bloodletting should be employed with great caution, he generally commenced the treatment, in such cases, with an emetic of Ipecacuanha, and after its operation he administered an opiate, a purge of Epsom salts, he says is to be given to cleanse the intestines, and after its operation small doses of Ipecacuanha, combined with opium, and rhubarb. when after the purging is much abated, the pain in the bowels, overcome, and the fever gone, he says the cold bath may be advantagiously employed to complete the cure. sometimes when there was much fever at the

commencement of the disease he gave the following mixture which, he says, generally proved very useful viz, two ounces of manna, with two grains of Tartar Emetic dissolved in a pint of common emulsion to which was added half an ounce of the sirup of white poppies, of this mixture he gave, an ounce every hour, until the intestines, were sufficiently emptied, after which an opiate was administered, and the cure compleated by the combination of bark, and opium.--These were the means used by him, when the disease was chiefly confined to the large intestines, unattended with any gastric irritation, or when it was not dependent on any other disease, But when it commenced with sickness of stomach, severe vomiting, or with cholera morbus, he first evacuated the stomach, by giving gentle stimulating drinks, such as a weak decoction of chamomile flowers, or by giving large quantities of warm water to which was added, a few drops of the spirits of harts-horn, to remove the spasms, which frequently distresses

the patient at this time, he also says, the intestestines must be perfectly evacuated, by giving the decoction of chamomile flowers in clysters, after thus evacuating the bowels, he gave an opiate, and if the stomach rejected it, he gave anodyne enemata, These means failing he says he has found great benefit to arise from wine, and spices, or from opium and camphor applied over the regions of the stomach; The oil of cinnamon, or mint, musk, and sometimes, elexir vitriol, and sweet spirits of nitre, he says are the best internal remedies, to calm the stomach after the bowels are cleansed. If after the employment of the above remedies, the vomiting still continues very violent, he places his whole reliance, on bathing the stomach with the opiates and camphor, and injections of laudanum, he repeated the injections, every six hours, and increased the quantity of laudanum, untill he overcame, the vomiting, and pain, or the head of the patient became affected, In some cases he says, he gave

as much as half an ounce at a time, before he was able to accomplish his purpose, But previous to giving opium in so large a quantity, I generally ordered the feet to be bathed, and applied blisters to the legs; or if a violent and fixed pain in the stomach, or in any part of the abdomen, had continued from the beginning of the disease, and was not removed by bleeding and warm fomentations, I then applied a blister to the seat of the pain; these means, either alone or combined, he says seldom failed to cure the disease. —

The practice of Dr Moseley, in the treatment of this disease, differs somewhat from any other with which I am acquainted, he considering, as before mentioned, that the disease is a fever of its own kind thrown on the intestines, by sudden suppression of perspiration, his leading indication is therefore its restoration. This he says may be accomplished by a careful and continued employment of sudorifics; preceeding the use of them

however, he employs the lancet, succeeded by an emetic and mild cathartic.—

"Bleeding" says the doctor, "being an operation of great consequence in the flux, the cure is generally begun without, repeating it as symptoms authorise. There are but few instances where it may not be safely done in the beginning of the disease; the necessity is obvious, where the patient is plethoric, with much fever, full pulse and severe pains." After bloodletting he gave, an emetic of specacuanha, which cleanses the stomach of its impurities. "But our great expectation from vomiting is, that its action on the muscular fibres of the stomach, forces open the extreme arterial capillaries, forwards the circulation to the surface of the body, and induces to sweat." after the operation of the emetic, he gave an opiate. After the emetic, and opiate, the bowels should be emptied, but this is to be done with caution, if the patient be weak, and in such a manner as not to increase the flow of blood from the surface to that part, for in that case, he says the

advantage gained by the emetic would be lost, and our principal design frustrated.— The purgative to be used should be such as will fulfill the double indication of purging and acting on the skin at the same time, the antimonials are of this class, and of these he prefers the James's powder, or the common glass of antimony. The primæ viæ being cleansed, and the revulsion begun, it must be supported by sudorifics, that the disease may be thrown off by sweat. This he says will be accomplished by administering opiates, and diaphoretics, as the case may require.— The combination of laudanum and antimonial wine he thinks highly of, and says it is a pleasant and certain diaphoretic. When antimonials, or other emetic medicines are given to excite diaphoresis, laudanum or opium should be added, as the opium diminishes their irritation and allows them to be given in much larger doses.— After the diaphoresis has begun, he directs the patient to be warmly covered, and the cold air excluded from coming in contact with him. Warm drinks, as barley-

water, mint, sage, balm, or oatmeal tea are also directed to be copiously taken, and sometimes a little gruel or thin flour pap, with the addition of a spoonful or two of good white wine, may be allowed. In some obstinate cases besides the antimonials purgative, he says vomiting with Ipecacuanha will have to be frequently repeated before sweating can be induced. Sometimes the flux continues in some patients from mere debility, or relaxation of the vessels, without there being much griping or any febrile symptoms present, in such a case, "I never hesitate", says he, "to give bark with snake root and wine", however he directs that the bark should always be given in decoction, and not in substance, as in all cases of inflamed bowels, it causes irritation and griping.— He says it sometimes happens that irritation is kept up by the remaining acrimony after all the other symptoms are subdued this he says may be cured, by rhubarb and magnesia, or any other mild cathartic— During convolescence, patients who have been much reduced

by the severity of the attack, or those who are subject to relapses, or from weakness of the bowels have returns of diarrhœa, or tenesmus, on the least exposure to cold, will (he says) derive great benefit from a flannel shirt, or jacket worn next the skin, both as a prevention and cure. —

I have now given the practice pursued by the Doctor in the early part of his residence in the West Indies. It only remains for me to say a few words, concerning the treatment adopted by him in the latter part of his practice there, and subsequently in London. At this time he never gave the Ipecacuanha, as a vomit, nor the glass of antimony as a purge, but before their administration, he puts the patient to bed in order to induce sweating, this he says most generally insured that operation on which the cure depends, and sometimes the disease was completely cured by the sweating, induced by a single dose, without either vomiting or purging being excited. He says that now, (speaking of his practice in London) when called

to a patient labouring under dysentery he directs twenty or thirty grains of Ipecacuanha, or ten grains of James's powder, or from five to twenty grains of the glass of antimony, (according to the age, or constitution of the patient) to be immediately given, and ordered the operation of sweating rather than vomiting supported, but should vomiting take place it must be promoted by diluting, particularly when the matter brought up indicates foulness of the stomach, and as vomiting generally produce sweating when the patient is kept warm in bed, it still will prove serviceable. Ten grains of the glass of antimony he says purges less when the patient is confined to his bed, than three would when walking about, - sometimes while the patient is confined to his bed there is no appearence of fever or dysentery, yet from the sudden suppression of the flux, the dysenteric symptoms will return, as soon as he leaves his bed, or goes into the air, in such cases, he recommends a tablespoonful of his vitriolic solution to be given every eight hours, with now and then a little clalk julep and laudanum, by these means

he says the disease can almost always be easily removed. —

I shall now give the treatment of dysentery, which is generally pursued by the most able practitioners of the present day, in this country. — Considering it a disease dependent on inflammation, more particularly of the lower intestines, we are called upon to overcome the inflammatory and spasmodic action of the colon, and this is to be accomplished by the free use of the lancet emetics and cathartics. —

When the patient is vigorous, or of a plethoric habit, and the inflammatory symptoms run high bloodletting is absolutely necessary; in such cases we must not content ourselves with a few ounces (for it would be of little or no utilety) but we are to abstract largely twenty or thirty ounces in such cases, may be taken at the first bleeding, and if the patient is not relieved by this, at our next visit the operation must be repeated. In some cases however, we must be careful how we

draw blood, as the disease is very apt to run into a low fever, and sometimes assumes the typhoid type. —
Emetics have been highly extolled by some practitioners in the cure of this disease. our venerable professor Dr Cove says that Van Swietan recommends the use of emetics, and directed that a vomit of Specacuanha should be given every morning for three mornings in succession and after that one every other morning for three days more, giving opiates in the evening after each vomit. Specacuanha or emetic tarter may either be used, the latter however, is most generally employed. Our distinguished professor of the practice of physic, does not generally approve of emetics in this disease, except when the stomach is loaded with foul matter attended with nausea or vomiting, and then he thinks, if judiciously employed they may prove very beneficial, when used he recommends Specacuanha. —
The use of purgatives is sanctioned I believe by every practitioner, but there is some contrariety of opinion

respecting those most proper to be employed on this occasion.—
Castor oil is most generally resorted to; it should be given in large doses, several ounces may be given in twenty four hours with advantage.—
The neutral salts are also used to evacuate the primæ viæ, sometimes tartar emetic is combined with them, one or two grains of tartarized antimony added to an ounce of Glaubers, or Epsom salts, often prove very serviceable in procuring free and copious discharges.—
In our dysenteries, and such as occurs in warm climates. Professor Chapman is of opinion that the mercurial purgatives, are the most proper, he says he has long been in the practice of prescribing calomel and rhubarb and when it was lingering in its operation he gave castor oil or Epsom salts to assist its action &c.—
Gamboge has of late years, gained much repute in dysentery as a purgative.— Having freely evacuated the alimentary canal, it should be kept open by giving mild cathartics, as castor oil or Epsom salts &c. but if we suspect

any hepatic derangement, calomel must be resorted to again.
In some cases there is great difficulty in procuring a stool, when this is the case, jalap and cream of tartar, or a decoction of senna with the addition of Glaubers salts, have been found serviceable, when these have failed, large and repeated doses of calomel combined with opium have sometimes succeeded in procuring copious discharges. To aid their tardy operation enemata are often employed with great advantage.—
There formerly prevailed a great diversity of opinion concerning the extent of using purgatives in this disease. It now seems to be a maxim settled, and very much by common consent, that they are to be continued till the evacuations assume a natural appearance. They may be used daily changes being made from one to another of them according to circumstances, and repeated until the feces assume the above appearance.—
Opium is a very valuable article in dysentery, some physicians are in the habit of using it at the commencement of

of this complaint, but in general it should not be resorted to until the proper depletory means, as bleeding purgeing &c have been promised, and then if used with discretion it is one of the best remedies we possess; It is generally considered to be more beneficial when given in combination with Ipecacuanha and calomel, or with Ipecacuanha alone — The usual practice is to purge the patient during the day, and give opiates at night, and when the stomach is very irritable, opium should be combined with the purgative, It is at this stage of dysentery Dr Chapman says he has found the saccharum saturni very useful. In the years of 1823 and 4. he says he used the lead with great advantage after other evacuations had been promised. In some cases he says he combined the lead with Ipecacuanha. he says he also found the combination of Ipecacuanha, opium and lead very useful, it allays spasm, calms the irritation of stomach, and relaxes the surface. —

When there is severe tormina, accompained with great irritation or disorder of the stomach the oleaginous mixture may be given with good effect. The cretaceous mixture is also

highly recommended.— A strong solution of soda dissolved in lemon juice or vinager, has been given it is said with very salutary effect. Dr Burrie says in the early stage of the disease he derived great benefit from its use, but in the latter stages, he thinks there is no advantage to be derived from its employment—

Opium applied to the rectum, or one two, or three grains of it made into a suppository and put up the rectum has been found useful in relieving irritation and tenesmus.— Enemata of fresh butter, or lard melted, and thrown up the rectum, have proved useful, particularly in cases of irritable or excoriated fundus.— Anodyne injections, consisting of opium dissolved in mucilage of gum-arabic or flaxseed tea, sometimes prove more efficacious than opiates given in any other way.—

Concerning the employment of diaphoretics in dysentery there is a great diversity of opinion; by some practitioners they are regarded as almost a specific remedy; though others are not wanting who as loudly condemn

them.— This difference of sentiment I conceive to have arisen from their injudicious employment, given in the early stage of the disease before the alimentary canal has been cleansed, and vascular action somewhat subdued, they are seldom of much utility, but on the contrary, they often prove injurious.—

After having sufficiently evacuated the stomach and bowels, and reduced the febrile excitement, diaphoretics may not only be given in safty, but with superior efficacy, in fact I think they should be classed among our foremost remedies,

The combinations of Ipecacuanha are very useful in almost every stage of the disease, particularly when there is much pain, and the desire to stool frequent and ineffectual— Professor Chapman speaks very favourable of it, and observes "the efficacy of the medicine in this disease, does not rest on my own authority, It has been employed" he continues, "for the last half century, by the most celebrated practitioners in every quarter of the world, with the most unqualifi-

ed commendations." The usual mode of administering it, is with opium a grain of ipecac with half a grain of opium every two, three, or four hours; the addition of a grain or two of calomel sometimes increases its beneficial qualities.— The combination of laudanum, antimonial wine, and sweet spirits of nitre, is a neat and useful diaphoretic— That combination of ipecacuanha well known by the appelation of Dovers powder is suppassed by no article in the catalogue of diaphoretics, either as regards certainty or utility, it both serves as an opiate in allaying intestinal irritation, and as a diaphoretic in promoting perspiration.— The antimonial preperations have been highly praised by Pringle and others, and there is no doubt of their efficacy in some cases of the complaint, yet notwithstanding the praise in their favour, I cannot but think that in general ipecacuanha is a much better medicine.— Warmth applied to the surface is very useful in promoting diaphoresis, such as warm fomentations, the warm bath, the vapour bath &c—

Professor Chapman speaks very favourable of the application of a flannel roller to the abdomen, beginning at the hips and extending it up to the arm pits, at the same time drawing it as tight as the patient can conveniently bear, he says the roller answers a double purpose. viz, supporting the parts, and promoting diaphoresis.— Fomentations, anodyne liniments, and other local applications, are sometimes used with great advantage- when the abdomen is tense and painful, cups, or leeches may be applied to it, with good effect.— There is a remedy (which I have not yet mentioned) far superior in efficacy to the above viz, blisters, they are useful when either applied to the extremities or abdomen, but the latter place when it can be accomplished should be prefered. Dr Chapman advises us to covour the whole abdomen, as large blisters excites but little more pain than small ones, and are much more beneficial.— Much has been said and written on the use of mercury in the cure of dysentery. In the West Indies, and other warm

climates, it is a common practice to excite a salivation as speedly as possable, while in this country it is seldom resorted to. I believe it is most generally thought that Cleghorn was the first who used mercury in this complaint,- Professor Coxe says it is no new practice, as the mercurius dulcis was used as far back as the time of Boyle who recommended it very highly in this complaint.-
Dr James Johnson a very able writer on this disease is a great advocate for salivation, he says there are two modes of accomplishing this purpose, and both very effectual in curing the complaint.- In doubtful cases, or those wherein he wished to induce a speedy salivation he gave calomel in scruple doses, repeated two, three or even four times a day, without the use of any other medicine - He says, that it almost always eased the tormina, diminished the propensity to stool, brought on a ptyalism sooner, and sit caiser on the stomach, than either larger or smaller doses, or any other plan of administering the medicine,- "a curious", says he, "but a certain fact."—

Another method (and the one which Dr. J. prefers) is to give calomel in small doses, either alone or combined with an opiate, or with an opiate and diaphoretic, from twenty four to fourty eight grains of calomel, two to four of opium, and from ten to fifteen grains of antimonial powder, or Ipecacuanha, may be given in divided doses, at intervals of three, four, or six hours according to the violence of the case, during the course of the day and night; after one, or doses of the calomel &c. he recommends a dose of castor oil to be given, which may be repeated daily taking care not to interfear with the main object in view.— When the evacuations presented, an alarming quantity of blood, he resorted to venesection without the least fear of that bughear— debility—. Emolient oily glysters he says may sometimes be used to allay tenesmus &c. Flannel should be worn next the skin, and a bandage of the same, with two or three additional folds, rubbed once or twice a day with a liniment, composed of mercurial ointment and laudanum, applied to the abdomen.—

"By a steady perseverance in this simple plan for a few days", he says "the mouth will become sore and every bad symptom vanish".—

In our practice mercury is seldom resorted to, with a view of salivating, though in some few instances I have known it to produce the happiest effect.—

Sometimes from the obstinacy of the attack, or from venisection and the other means employed to subdue the complaint, the patient becomes very much debilitated in such cases we must endeavour to give tone to the system by the use of tonics, stimulants &c. The most useful of which Professor Chapman says, are the combinations of calomel and opium, carbonate of ammonia wine whey &c.—

External stimulants are also useful, and in fact the whole class of remedies used in other cases of debility are more or less employed— Of late practitioners have got very much in the practice of using the spirits of turpentine, Professor Chapman thinks it is a very valuable medicine, it may be used either alone, or in combination with

opium, or with carbonate of ammonia and laudanum.—

Diet— In this as in all other inflammatory diseases great attention should be paid to the diet, it must be obvious to every one acquainted with diseases, that mild articles and those of the least stimulating kind are the most proper; every sort of indigestable food, or which readily tends to putrefaction, ought never to be employed in any stage of the disease; fomented and spirituous liquors are also to be guarded againts.—

The preparations of barley, rice, sago, flour, tapioca, arrow root, chicken water, toast water &c are the most proper articles of food.— The drink throughout the whole course of the disorder should be in general diluting, mucilaginous, and mild, as barley water, rice water, gum arabic water, flaxseed-tea, marsh-mallow-tea, and the slippery elm tea, the two latter of which is in great celebrity. During convolescence the diet should be light at first and but little taken at a time, gradually increasing it both in quality and quantity, when the patient is so-

far recovered as to allow animal food, salted meat is generally preferable to fresh. Wine also in moderate quantities may now be given with advantage.—
Great attention is necessary to be paid to the article of clothing, both during and after the disease, flannel should be worn next to the skin in general, with one or two additional pieces of it over the abdomen, the feet should be kept warm and dry, and all exposure to cold wet, damp, or night air carefully avoided.—

I cannot conclude this Essay without soliciting a liberal indulgence for its many imperfections.— and I should do injustice to my feelings, were I not to return my sincere thanks, to the Illustrious Medical Professors, of the University of Pennsylvania, for their kindness towards me, as gentlemen, and for the useful information derived from their Lectures, which will ever be cherished, as my most valuable acquisition.—

Wm. Smith, Trenton—